

CLAIMS:

What is claimed is:

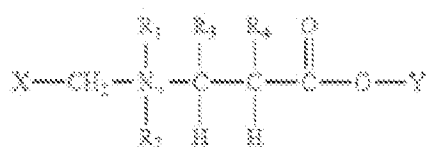
1-3. (canceled)

4. (previously presented) The method of claim 7, wherein the aqueous mixture includes a solvent selected from the group consisting of alcohols, glycols, glycol ethers and mixtures thereof.

5-6. (canceled)

7. (currently amended) A method of treating a gas well comprising:

introducing into said well an aqueous mixture during gas production from the well to reduce the effects of liquid loading, the aqueous mixture comprising an amphoteric surfactant in an effective amount to create a stable foam within the well, the amphoteric surfactant having the general formula:



wherein X is a hydrocarbyl group containing from 2 to 36 carbon atoms, which can be optionally substituted with functional groups, R₁, R₂, R₃, and R₄ are independently hydrogen or a hydrocarbyl group containing from 1 to 4 carbon atoms, and Y is hydrogen, a negative charge, or a hydrocarbyl group containing from 1 to 4 carbon atoms, wherein any of R₁ R₂ R₃ R₄ and Y can be optionally substituted with functional groups, and wherein the surfactant is free of any significant amount of chloride containing compounds.

8. (previously presenttd) The method of claim 7 wherein the weight ratio of amphoteric surfactant to water in said aqueous mixture is from about 1:46 to about 1:10.

9. (original) The method of claim 7, wherein the aqueous mixture is introduced through a capillary string.

10. (original) The method of claim 9, wherein the aqueous mixture is non-corrosive to metallurgy used in the capillary string.

11. (original) The method of claim 7, wherein the stable foam created in the well by the amphoteric surfactant mixture is effective in reducing the effects of liquid loading in the well.

12. (original) The method of claim 7, wherein the resulting stable foam is effective at increasing production of gas from the well.

13. (original) The method of claim 7, wherein the resulting stable foam is effective at increasing production of gas and other hydrocarbon liquids from the well.

14. (original) The method of claim 7, wherein X is a hydrocarbyl group substituted with a functional group selected from an amido group, amino group, ester group, and combinations thereof.

15. (currently amended) The method of claim 7, wherein the amphoteric surfactant is introduced to the well to establish ~~between~~ about 1,000 parts per million by volume of surfactant.

16. (original) The method of claim 7, wherein the weight ratio of amphoteric surfactant to water in said aqueous mixture is from about 1:46 to about 1:7.